



# Major Public Project Construction Noise Variance Questions and Answers

**Updated: 4/27/18** 

#### Introduction

On April, 26, 2018, the Seattle Department of Construction and Inspections (SDCI) granted WSDOT a nighttime-construction noise variance for the SR 520 Montlake Phase. WSDOT conducted public outreach in advance of receiving this noise variance, which included:

- Hosting a public meeting on Feb. 28, 2017, to share information, answer questions, and collect public feedback on WSDOT's application.
- Attending the SDCI-led public meetings on April 6, 2017, and Feb. 15, 2018, to provide information and receive public comments.
- Providing ongoing public updates regarding the status of WSDOT's noise-variance application.

WSDOT has since updated the questions and answers below to provide the latest information regarding the SDCI decision. More detailed information regarding the noise-variance process can be found on the <u>SDCI's Land Use</u> and <u>Information Bulletin</u> (project # 3030792) in the April 26, 2018, "Decision/Recommendation" document.

### 1. Question: What is an MPPCNV?

**Answer:** A Major Public Project Construction Noise Variance is a noise variance granted by the city of Seattle that defines the allowable nighttime noise limits for a construction project. It is tailored specifically for major public construction projects, such as the SR 520 Montlake Phase, and is administered by the Seattle Department of Construction and Inspections (SDCI). The Montlake Phase variance defines the noise limits and regulations that nighttime construction work must adhere to throughout the Montlake Phase project. The project includes construction of the West Approach Bridge South, Montlake lid and interchange, and a bicycle/pedestrian land bridge over the highway.

#### 2. Question: Why did WSDOT apply for an MPPCNV?

**Answer:** WSDOT applied for this variance because construction crews will work at night within the Seattle city limits during the Montlake Phase. Nighttime construction work is necessary to avoid disrupting weekday traffic and to provide a safe environment for construction crews and the traveling public. Since nighttime work will be required, WSDOT received this variance from the city to set limits on the noise levels for nighttime construction activities.

Additionally, WSDOT applied for an MPPCNV to comply with the city of Seattle noise code for major public projects. The city of Seattle defines a "major public project" as a project for a public facility that has a substantial impact on the public safety, health and welfare and the provision of public services, including transportation services.

#### 3. Question: What is included in WSDOT's MPPCNV?

**Answer:** The Major Public Project Construction Noise Variance application includes the following information:

- Project description and proposed construction activities: This section includes a description
  of how WSDOT anticipates a design-build contractor may construct the Montlake Phase project.
  The specific construction activities may change once a contractor is hired and finalizes the project
  design and construction plans. However, final construction plans must comply with the
  requirements identified in the granted noise variance.
- WSDOT's baseline noise measurements and proposed nighttime noise limits: The variance includes WSDOT's proposed nighttime noise limits, which were developed based on existing nighttime noise conditions.
  - The MPPCNV contains nighttime-construction noise limits that are based on preconstruction conditions of specific areas in the Montlake neighborhood. These nighttime noise limits include hourly averages of nighttime noise.
  - A graphic on page 15 of WSDOT's Jan. 17, 2018, application, (available on the <u>SDCI's</u> <u>Land Use and Information Bulletin</u>, project # 3030792) shows the seven sites where

existing nighttime noise levels were measured, the existing nighttime noise conditions, and WSDOT's proposed (and now granted) nighttime sound limits. Data on current nighttime sound levels were collected from midnight to 5 a.m. during periods when no significant nearby nighttime construction activities were underway. WSDOT's proposed hourly average noise limit for the Montlake Phase is six decibels higher than the existing nighttime noise conditions.

- Noise Management and Mitigation Plan: The variance provides a framework for the Noise Management and Mitigation Plan to be completed by WSDOT's design-build contractor, once hired. The plan will identify how the contractor will keep noise below the limits approved in the variance, including the measures needed to meet the conditions set in the variance granted by the city. Once hired, a design-build contractor will complete this plan based on selected construction means and methods and the variance requirements. The design-build contractor will be required to revise and update the Noise Management and Mitigation Plan to demonstrate to the city of Seattle how the contractor can construct the project within the noise limits set by the MPPCNV.
- Public outreach and process to resolve noise complaints: The application also describes how WSDOT and the contractor will maintain communication with the public during construction, and the process for a neighbor to make a noise complaint.
- 4. Question: How will nighttime construction noise in the Montlake Phase differ from nighttime noise experienced during the West Approach Bridge North (WABN) construction? Answer: Nighttime construction activities during the Montlake Phase project likely will be similar to those of the WABN project, except in different locations as construction moves to the west. There is a difference, however, in the nighttime-construction noise variances granted for the two projects. See Question 5 for more information on the difference between the two types of variances.
- 5. Question: What is the difference between the nighttime noise variances used for the WABN project and the nighttime noise variance that WSDOT received for the Montlake Phase? Answer: The MPPCNV granted for the Montlake Phase differs from the temporary, short-term noise variances (TNVs) granted for the WABN project in that the MPPCNV sets limits for nighttime construction noise for the duration of the project. WSDOT applied for an MPPCNV for Montlake Phase construction in order to comply with the current city of Seattle noise code. MPPCNVs are tailored specifically for major public construction projects, such as the Montlake Phase. The goal of obtaining an MPPCNV is to provide a clear, longer-term set of limits and requirements for nighttime work and noise levels during construction of the Montlake Phase.

The WABN construction project used TNVs rather than an MPPCNV. TNVs are short-term variances, applicable for up to 14 days, which allow the contractor to perform certain construction activities, such as paving, at night. TNVs typically do not set specific noise-level limits. However, TNVs do come with conditions that a contractor must comply with while conducting the variance's allowed activities, and those conditions could include noise-level limits. Current city of Seattle practice is to limit the issuance of consecutive TNVs.

- 6. Question: How will nighttime noise limits for the Montlake Phase be monitored and enforced? Answer:
  - Nighttime noise monitoring is a variance requirement and will be performed throughout the entirety of Montlake Phase construction. Noise monitors will be used 24 hours a day to verify that nighttime noise activities remain within the approved limits set in the variance. Noise monitors will also detect if any exceedances occur. Weekly and annual noise-monitoring reports will be provided to the SDCI to demonstrate compliance. These reports will be made available to the public as well.
  - An independent noise monitor will be hired by WSDOT to oversee noise monitoring and reporting of the contractor's work at night, and will report on compliance directly to the SDCI. The independent monitor will be on site during all periods of scheduled nighttime work and will be notified of any noise complaints received. If the monitor receives a complaint during nighttime work hours, the monitor will notify the contractor, perform a site inspection and conduct additional noise measurements while on site. If noise exceedances occur, WSDOT will work with the

Montlake Phase contractor and the SDCI to assess if the associated construction activity should be halted or modified. The SDCI retains the authority to suspend or cancel the noise variance if the requirements of the variance are not met.

• If members of the public wish to submit a noise complaint, they can continue to use the SR 520 24-hour construction hotline.

### 7. Question: How many years will the MPPCNV be in effect?

Answer: WSDOT received a five-year nighttime noise variance for the Montlake Phase to allow necessary construction work to occur between 10 p.m. and 7 a.m. on weekdays and between 10 p.m. and 9 a.m. on weekends and legal holidays. Only nighttime construction activities related to Montlake Phase project are covered by the MPPCNV. As noted in conditions #16 and #17 of the noise variance: "[SDCI shall] conduct a one-year review and may modify the terms and conditions of the Noise Variance, Decision, or NMMP [Noise Management and Mitigation Plan] if it is determined that the terms or conditions of the Noise Variance, Decision, or NMMP are not adequately protecting public health and safety or reasonably controlling or mitigating the construction noise, or that more reasonable methods of mitigating the construction noise should be implemented.

"After the one-year review [...] subsequent annual evaluations shall be performed of the track record on noise compliance and effectiveness of construction noise mitigating conditions in place. If necessary, new or modified conditions may be imposed to improve compliance results."

## 8. Question: What noise-mitigation measures will WSDOT implement to reduce construction-noise impacts during construction?

**Answer:** The Montlake Phase nighttime noise variance application documents the measures WSDOT will implement to reduce construction-noise impacts to residents during construction. The following are requirements of the noise variance and must be in place for all Montlake Phase construction activities occurring between 10 p.m. and 7 a.m. Monday through Friday, or between 10 p.m. and 9 a.m. Saturday through Sunday and legal holidays:

- The contractor will meet the noise-level limits established in the noise variance.
- The contractor will use broadband or strobe backup warning devices, or use backup observers in lieu of backup warning devices for all equipment, in compliance with Washington Administration Code, Sections 296-155-610 and 296-155-615. For dump trucks, if the surrounding noise level is so loud that broadband or strobe backup warning devices are not effective, then an observer must be used (WAC 296-155-610). This condition will apply to activity conducted between 10 p.m. and 7 a.m., Monday through Friday, and between 10 p.m. and 9 a.m. on Saturday, Sunday, and legal holidays. No pure-tone backup warning devices will be used after 10 p.m. and before 7 a.m. weekdays or 9 a.m. weekends and legal holidays.
- The contractor will not conduct impact work, such as auger shaking, jack hammering and impact pile driving, during nighttime hours from 10 p.m. to 7 a.m. on weekdays and 10 p.m. to 9 a.m. on weekends and legal holidays.
- The contractor will use compressors with a measured noise levels of 71 dBA at 50 feet or less for
  areas where modeling showed mitigation for compressors was needed to reduce noise levels
  below the noise level limit. The contractor will have an option to propose alternative mitigation
  methods providing equivalent sound attenuation, such as surrounding the compressor with a
  temporary noise wall or baffle system to meet the noise level limits.
- The contractor will pave construction access roads and haul routes near residences where possible to reduce dust and noise.
- The contractor will securely fastened truck tailgates.
- The contractor will use sand-, rubber- or plastic-lined truck beds for all haul trucks to reduce noise, unless an exception is approved by WSDOT.
- The contractor will not use compression brakes.
- The contractor will not leave equipment to idle for longer than five minutes,
- The contractor will use temporary noise-mitigation shields, enclose equipment, or use low-noisegenerating stationary equipment, such as light plants, generators, pumps, and air compressors near residences where practical.

Once hired, the contractor for the Montlake Phase project may choose to implement additional measures, such as temporary mobile noise barriers and noise-shielding equipment, and/or hotel accommodation for frontline neighbors, to reduce construction impacts during construction. The SDCI and WSDOT will review the contractor's selected noise-mitigation measures to verify compliance with the limits set in the variance.

- 9. Question: Why did WSDOT resubmit the SR 520 Montlake Phase application for an MPPCNV? Answer: WSDOT resubmitted the Montlake Phase MPPCNV application on Jan. 17, 2018, to provide more accurate public notice based on the location of known nighttime construction activities and staging. The Jan. 17, 2018, application clarified and replaced WSDOT's July 6, 2017, MPPCNV application.
- 10. Question: Were there technical issues with WSDOT's July 6, 2017, MPPCNV application? Answer: No. The only reason WSDOT resubmitted the Montlake Phase MPPCNV application was to provide more accurate public notice based on the location of known nighttime construction activities and staging.
- **11. NEW Question:** How will WSDOT encourage contractor compliance with the nighttime noise limits for the Montlake Phase?

**Answer:** In 2017 and 2018, WSDOT conducted public outreach regarding the nighttime noise variance. In response to the community feedback received, WSDOT has incorporated incentives into the Montlake Phase construction contract to reward positive performance by the contractor.